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ON THE
STATE OF THE
NAVAL STRENGTH OF FRANCE
IN COMPARISON
WITH THAT OF ENGLAND.

TRANSLATED FROM THE FRENCH OF HIS ROYAL HIGHNESS
THE PRINCE DE JOINVILLE.

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ON
THE STATE OF THE NAVAL STRENGTH OF FRANCE
COMPARED WITH THAT OF ENGLAND.

THE aim of the present notice, is to call the attention of all serious and reflecting minds to the state of our Navy: the country, whose bearing towards its true interests never fails, the country desires a Navy; she desires it strong and powerful. This is demonstrated by incontestible facts; but as yet no one knows its true elements, the true conditions of which the want is so strongly felt: we are not sufficiently alive to what passes around us; we do not sufficiently study the manner in which the funds voted by the Chambers are employed; we live on in our old prejudices, namely, that one must be a sailor, that is, must possess a special, theoretical, and practical knowledge, to be able to understand naval affairs. And this prejudice, kept alive by various circumstances, has hitherto prevented many clever men from studying the real state of our naval power.

The author of this notice desires, by means of a few facts of the clearest evidence—by a few simple calculations, and by reasoning to be understood by the meanest capacity—to dissipate the clouds by which this question has been enveloped. If he be enabled to render it as accessible and familiar to each of those who may be called on to decide on it, he thinks he shall have rendered an acceptable service to the profession to which he belongs. He trusts to be able to establish, without fear of contradiction, that the popularity which the Navy of France enjoys—that the ardent and so often manifested desire, to possess a strong and powerful Navy, derive their source in a sentiment which may be thus

paraphrased: "On the sea, as well as on land, we wish to be respected. There, as elsewhere, we wish to be in a situation to protect our interests, to maintain our independence, and to defend our honour, from whatever points we may be attacked."

Before advancing one step farther, I wish it to be clearly understood that I do not intend to mix up politics in this notice, but that it is dedicated solely to the consideration of our naval affairs. If I speak of England, or of any other power, it will not be with the narrow feeling of animosity, or even of national rivalry, but merely to show, from the fact of what passes amongst foreigners, what we ourselves ought to seek, or what to avoid. If I speak of war, it is not that I desire to see my country exchange the blessings of peace for such ruinous chances! I think, in order that peace may be worthy and lasting, it should lean on a force capable at all times of making itself respected.

Taking then the case of war as the foundation for my argument, I will seek an example which will develope my idea; I will suppose France under the necessity of defending herself against the greatest of maritime powers: I mean that of England. This being conceded, and proceeding in a methodical manner by means of this hypothesis, I begin my subject.

A fact of immense importance, which has for some years been realized, has given us the means to raise up again our decayed naval power; to cause it to re-appear in another form, admirably adapted to our resources and national genius. This fact is no other than the establishment and progress of navigation by steam.

Our Navy could only be a factitious creation when the empire of the seas belonged to him only who could command the greatest number of sailors. Our ruined merchant navy did not furnish us with a sufficient number of seamen. We might have struggled energetically to revenge insult—to efface melancholy retrospections; but, even should transient

success attest the courage of our sailors, the superior number of our enemies would at length baffle our efforts. Navigation by steam has changed the face of things: our military resources now take the place of our impoverished naval material. We shall always possess a sufficient number of officers and sailors to fulfil the duties yet remaining to the sea-faring man on board a steam ship. Machinery will supply the place of hundreds of hands, and, I need not say, that money will never fail us to construct such machinery; neither will soldiers, when the appeal is made for the support of the honour of our country. With a steam navy, an aggressive warfare of the most audacious nature is permitted at sea. We are then certain of our movements—at liberty in our actions: the weather, the wind, the tides, will no longer interfere with us, and we can calculate clearly and with precision.

In the event of a continental war, the most unexpected expeditions are possible. In a few hours armies may be transported from France to Italy, Holland, Prussia; what has been once accomplished at Ancona with a rapidity, seconded by the wind, may be again done without such assistance, and even in spite of it, and with still greater quickness. As I have already asserted, these new resources are admirably adapted to us, and the form of war, thus modified, does not leave the chances, between France and the enemies she may have to encounter, as they were thirty years ago. Thus, it is curious to inquire how far the progress of steam, and its probable application, has excited the attention of our neighbours.

The Duke of Wellington, before the Committee on Shipwrecks appointed by the House of Commons, stated as to that part of the coast of England opposite to that of France: "In the event of war, I should consider that the want of protection and refuge which now exist, would leave the commerce of this part of the coast, and the coast itself, in a very precarious situation."

On the 29th February, 1844, a motion was made in the House of Commons on the subject of harbours of refuge to be established on the English coast, and it was said during the discussion, "that it was the duty of Her Majesty's government to provide the means of security, not only for English commerce, but also for the coast itself." All were satisfied that if steam vessels had been in use at the period of the camp at Boulogne, Napoleon would easily have found means to have landed from fifteen to twenty thousand men on the opposite coast. It was added, they would not have answered for the success of such an undertaking, but that the effect of it would have been to "destroy that confidence our insular position now inspires us with." At the conclusion of the debate, it was pressed on the legislature to take into consideration the great changes that had taken place of late years in steam navigation, and the use which might be made of it in the event of a new war.

The warning is excellent for Great Britain; it is also excellent for all those to whom she teaches that her strength rests in that confidence inspired by her insulated position. Unfortunately we do not profit by it. These cries of alarm, emanating from the bosom of the English Parliament, ought to have their salutary influence on our Chambers, and throughout France itself: our line of conduct ought to be traced by the very finger of our neighbours! but it is not so: we fold our arms, while England acts; we discuss theories; she puts them into execution; she creates for herself a tremendous steam power, and reduces her number of sailing vessels, which she rightly judges useless: we, who ought to have preceeded her in this reform, or at least have followed her closely, have scarcely half a dozen steam vessels capable of entering into competition with those of the British Navy.

It is melancholy to record the fact; but we have been asleep, and the country has been lulled with flattering words and erroneous calculations. We have been persuaded, and the country also has been successfully persuaded, that it pos-

sessed a strong and respectable naval steam power: a deplorable error, and the source of a confidence still more deplorable. I am not one of those who, in the illusion of national self-love, believe that we are in a situation to struggle at sea on an equality with the British power; but yet I would by no means say, that in any event we could not resist her.

My well-grounded and decided idea is, that it is possible for us to sustain war against any power, even England, and that, in re-establishing a sort of equality by a judicious use of our means, at the least be able to advance surely towards our aim, which ought ever to be to sustain France in the position belonging to her. Our successes would not be transcendent, because we should be careful in compromising our whole resources in any one decisive meeting; but we should wage war surely, because we should attack two points equally vulnerable, namely, the confidence of the British people in their insular position, and her maritime commerce.

Who can doubt, but that with a well-organized steam navy we should possess the means of inflicting losses and unknown sufferings on an enemy's coast, who has never hitherto felt all the miseries that war can inflict; and with her sufferings would arise the evil, till then unknown to her, of confidence destroyed; the riches accumulated on her coasts and in her harbours will have ceased to be in security; and this, while by well-appointed privateers, the plan of which I shall develope by and bye, we could act efficiently against her commerce, spread over the whole surface of the seas.

The struggle then would no longer be unequal. I will continue to argue on the hypothesis of war: our steam navy would then have two distinct spheres of action. First, the Channel, where our own harbours might shelter a considerable force, which, putting to sea in the obscurity of night, might attempt most numerous and well-organized crusades. Nothing could hinder this force from reuniting at a given point on the British coast before daylight, and there it might act

with impunity. Sir Sidney Smith only required a few hours to occasion an irreparable injury to us at Toulon. And second, in the Mediterranean we should reign as masters! we should affirm our conquest of Algiers—that vast field open to our commerce and civilization; and then the Mediterranean is too far distant from England; the arsenals of Gibraltar cannot maintain a steam fleet, so difficult and so costly to sustain, and ever in fear of being reduced to inactivity for want of fuel: with freedom then to France to act thus victoriously in this sphere of action in all her projects, she would be enabled to execute them by means of steam ships, without reference to sailing vessels, whose vigilance would be deceived, whose rapidity would be outstripped.

To a steam navy, and to that alone, would devolve the duty of watching our coasts, and of signalizing the approach of our enemy; to cover our coasting trade, and to offer a strenuous resistance to the disembarkment, to the bombardments, and all the aggressions of the enemy; for it would be idle to assert that the same advantages we should possess in a steam navy may not be turned against us by her. One half of our frontier is maritime. In other days this enormous extent of coast, almost inaccessible everywhere, could have been defended by our army, or, at least, it was dangerous for sailing vessels to make a descent, from which little was to be feared, and all the more important points, our large harbours, and those spots where nature had done nothing in the way of defence, art had stepped in and fortified against all attempts. Now all is changed: with steam vessels our coasts can be watched in all their vast extent, from Dunkerque to Bayonne; England may annoy us, in the same manner as we can disturb her; in a few hours, an army embarked in a steam fleet at Portsmouth, or in the Thames, would soon present itself on our coast, penetrate into our rivers, disembark, and destroy our cities, arsenals, and commercial riches, with shell or bomb: the rapidity of their movements would insure success. The French army, its forts and cannon,

could not be in all places at once, and we should be informed of the appearance, operations, success, and departure of the hostile army at the same moment. If war were declared at the present moment, before the morrow we should receive information, perhaps, of the destruction of Dunkerque, Boulogne, Havre, &c., which cities it would have been impossible to defend against a bombardment. We should have the misfortune to witness the English flag floating in the road of Brest, our own immense arsenal protected till then by the tortuous windings of its navigation—difficulties which vanish before the application of the power of steam! Then, by the aid of a steam navy, England is in a state to menace our whole coast on the ocean, and to reign even in the Mediterranean by cutting off all our communications with Algiers; she might strictly and effectually blockade all our harbours, and that, from the very day war is declared if she wished it. And to resist her we have but one means; the same she employs against us, namely, a steam fleet. Well then, it must be repeated, this then is the melancholy aspect of the question, notwithstanding all the illusions we have pleased ourselves with: notwithstanding all the facts advanced, all our lengthened calculations, we have but a powerless force, a force whose nominal existence is wholly on paper. On what do they rely then, who desire to prove to France that she has a respectable Navy? On a squadron of sailing vessels, perfectly well armed I allow, and it is not for me certainly to deny its merit or its glory; but if it be true by the simple march of events, that that which was the first, that which was everything, twenty years ago, is but to-day an accessory in naval warfare,—this fine squadron is little else than an useless expense. But let us examine the facts which pass before our eyes; it is contemporaneous history, which each may appreciate or verify by his own proper experience.

Ever since the progress of civilization has caused the abandonment of galleys, (ancient enough of themselves,) each state has had its squadron or union of sailing vessels, indica-

tive of its naval strength. French and English fleets for a century and a half have disputed the empire of the seas, and, after many long and bloody struggles, the British flag is hoisted from one end of the globe to the other, as conqueror and master. One might have supposed the French Navy annihilated! It was not so however; and peace bringing with her, tranquillity, confidence, and commerce, our merchant fleet was enabled to form and employ a sufficient number of seamen, so that in 1840, was to be seen a squadron of twenty vessels riding, with honour, with the French flag at the mast-head, in the Mediterranean. Many well-informed persons were delighted at this brilliant result; they saw with pain this fine squadron condemned to inactivity, when the national pride was so cruelly wounded. At that time we possessed the superiority of organization and of numbers over the British force; our sailors, commanded by a clever and active chief, were in good training, and everything promised victory. I do not now detail my own views, but those of one of the most experienced of the English naval officers. Let us admit that the quarrel had brought on an engagement at that time; let us admit that the God of battles had been favourable to France: cries of joy would have resounded throughout the kingdom; no one would have thought that our triumph would have been of short duration. It must be owned that in a fight between a French and English fleet, success would be nicely disputed; it would belong to the most clever, the most persevering; but whichever side it may at length have turned, it would have cost dearly, and the losses would have been enormous on all hands; many vessels destroyed or disabled, it would ensue that each would return to its harbour in a dismantled state, shorn of its bravest officers and best seamen.

But I wish to suppose what is without example. I will grant that twenty vessels and fifteen thousand English sailors *can never be taken as prisoners* into Toulon by our triumphant fleet. Could victory be more decisive than this, *even were it so?* Should we have conquered an enemy who allows himself

to be beaten at the first blow, whose means fail him to repair his defeat, and who to wash out an outrage is accustomed to consider his sacrifices? Whoever is acquainted with the English character must know that, under the like circumstances, they would be seen animated by an immense desire to revenge a check, before unknown in their annals—a check which reflected even on their existence as a nation! One would then perceive all the maritime resources of this immense empire—its enormous material, and its riches—unite to wipe away the stain on the British Navy. At the end of a month, one, two, nay three fleets, as powerfully organized as that we had taken, would be at our ports. What should we have to oppose to them? Nothing but wrecks! And this is the point where the veil must be torn away, which hides from our eyes the secret of our weakness. Let us allow it manfully; a victory like that which we have detailed, happening in 1840, would have been the commencement of another destruction of the French Navy; we were already at the end of our means, our stores were not sufficient to repair the mischief our twenty vessels would have suffered from one day to another, and our appearance would then have offered the spectacle of impotency still more wretched! It is not, indeed, known how much of effort it had cost to arm these twenty vessels which gave France so much confidence and pride; it is hardly known that the exhausted framework of the Conscription had no more seamen to offer, and, what must still be added, is, that at the first sound of war, the nursery, so impoverished, of our merchant service, would be reduced to nothing, and the few arms which yet remained would give themselves up to the productive speculation of privateering. Many times during its past history, France, when thought to be without soldiers, was enabled to send forth millions from her bosom as if by enchantment; but it was not so as to naval armaments: the sailor is not immediately formed; he is a workman of art, who, if not brought up from childhood to the trade, ever shows a great inferiority. Ever since we have

attempted to train up seamen, we have succeeded, it must be admitted, to produce people who do not feel sea-sickness; but the name of sailor is not obtained so easily.

Thus then the wreck of our victorious squadron is either blockaded or assailed by numerous forces, who, to the full power of their organization, join the ardent desire of revenging a defeat. The fruit of success and of bloodshed is lost; it is no longer permitted to call a victory that which turns out to be a momentary superiority, which has left behind it the certainty of defeat, and that because, with no forethought for the morrow, we have used up all our means at once.

No, we must not accustom the country to amuse itself in time of peace with squadrons, and to buoy ourselves up with the idea that that gives us power. Let us never forget the effect produced by the recall of the fleet in 1840: it was, nevertheless, proper to do it then, and would be right again to do it at the first alarm of war.

It is clear, then, that sailing vessels for the future cannot form the body of our naval power; the employment of steam ships reduces them to the subaltern position of the besieging artillery of an army by land. By the employment of a squadron of steamers, a certain object in an expedition may be carried into effect by means of these sailing vessels, namely, when one has to act against a fort, a maritime city, which must be destroyed by bringing together a large mass of cannon to bear on one point. Beyond that, no other service can be required of them, which they could not, nor indeed ought not to render: and some persons must be careful how they persevere by an exaggerated respect for ancient tradition in a dangerous course, at the end of which a very serious account may one day be called for by France, then undeceived.

I should not hesitate, for my part, to enter from this very day into the contrary course; and I would candidly ask myself the question, to ascertain if, in maintaining eight vessels armed, and eight in commission for no other purpose than to strike the eye of superficial observers, a vast deal too much is done?

It will perhaps be answered, that these vessels are the school of discipline for officers.

But every re-union of vessels, whether sailing or of steam, will attain the same end; it is not necessary to have for that purpose vessels, (of all floating machines the most expensive,) which must be disarmed in the event of war.

Would it not be better to employ the leisure of peace in preparing and sharpening a blade which would assuredly do its duty in time of war? I do not fear to assert, that from the formation of a squadron of steam ships more new ideas would flow and veritable projects be made, than have appeared since the epoch of the last war.

In short—and the whole question lies in this—let us look to the other side of the Channel, and see what England is doing; look at the decision with which that sagacious country, that country so alive to its own interests, has discarded the old instruments of its power, and seized on a new arm.

Most assuredly, if anywhere it were desirable to uphold squadrons of sailing vessels, it must have been in the councils of the British Admiralty; enough of profit and glory have emanated from them! but they have followed the march of time, they have listened to the voice of experience, and they have found that sailing vessels become useless when a new power, capable of effecting every object in spite of them, has entered into competition.

Now, then, let us look at our squadron, blocked up by the force of events in the Mediterranean; what have the English Government opposed to it? Three sailing vessels*, but then they have eleven steam ships, nine of which are of large dimensions; and with this strength there is enough to cause

* The English Government this year reduces the number of her armed vessels from seventeen to nine. Three 3-deckers are employed as guard ships in the harbours: Shaerness, Portsmouth, Plymouth; three in the Mediterranean; one in the Pacific Ocean; one in China; one at the Antilles and North America. Seven out of these nine ships of war carry the flag of General Officers.

her flag to fly, and her policy to triumph. Our budget, I allow, gives us an effective force of forty-three steam vessels, that is something, but it is well known in England what these steamers are worth, and this is the whole value they put on ours.

Altogether, Great Britain now counts upon a hundred and twenty-five steam vessels of war! of this number seventy-seven are armed; and one must add to this two hundred vessels of superior calibre, ready and able to carry heavy cannon and troops, which the merchant navy would furnish any day it might be thought necessary.

This is not all; to give an idea of the real power of this steam fleet, one must have inspected closely all that their armaments possess of formidable, one must have seen the care and clever foresight with which all has been studied. The war steamers of England have not been built for all services indiscriminately; in their construction there has been but one idea, one aim, that of war; they unite, with wonderful aptitude to the things peculiarly belonging to the sea, extreme swiftness, powerful artillery, and great space for occasional troops.

Yes; this armament is, indeed, formidable! Yes; this exclusive care that England has employed to build up and perfect this branch of her maritime service is a warning we should not neglect, under the penalty of one day seeing all that is dearest to a people, namely, the integrity of our country and our national happiness, placed in jeopardy.

There is, I repeat it, a very simple means of dispersing this danger, and rendering the chances of a struggle, if ever it should present itself less unequal; it is to arm ourselves as others arm against us; it is to give to our steam navy, which still languishes in the uncertainty of experiments, a powerful impulsion and a large development: with the resources that this navy, thus rendered perfect, would furnish us for attack and defence, France could quietly repose in the certainty of its strength; but I must say it again, in this, as in everything else, to do it well it is necessary to be serious!

Our steam navy bears date from 1829; the expedition to Algiers was the epoch of its first essays; we were struck at that time with the advantages it was possible to draw from its application, and we hastened to commence building in the same mould a sufficient number of vessels like unto those which served in the expedition. But such was the daily increasing importance of the service of Algiers, that these vessels, scarcely yet built, were obliged to be put in service with every urgency, and often obliged to be sent to sea before their repairs were completed; they could not form a subject for proper experiment, or allow of any ameliorations. What they required, above all, was to be employed in stations where they might be placed in competition with those of the stranger. This inconvenience, joined to the prejudice still existing in favour of sailing vessels, was the cause that, from 1830 to 1840, the progress of our steam navy was null: but science has made rapid strides; the Royal Navy of England, having time for experiment, and more than that, having under her eye a merchant steam navy whose numbers and competition brought improvement each day, was enabled to send out to sea the most magnificent vessels.

The men who governed our affairs in 1840 were struck by this progress and felt its importance, and an energetic attempt was then made to give France a real steam navy, by the construction of our transatlantic packet boats.

Unfortunately, this attempt was the only one; notwithstanding the praiseworthy and persevering attempts of the Department of Finances to trace a course of amelioration in the steam navy by the example of its packet boats, an inconceivable obstinacy prevailed to allow it to stagnate; and now, far from offering means of resistance in the event of a war, it does not even suffice for the occasion of peace. And no one can accuse the Chambers of this unhappy inefficiency. Each time that funds have been applied for to give France a steam navy, they have been voted with a patriotic eagerness. Money has never been wanted; and it

was hoped there would have been a result answering to all the expence, to all our sacrifices; a result, indeed, is apparent to all! by an excess of foresight, too common amongst us, the administration has thought fit, before all, to create the means of repair for the new navy; in all our harbours have arisen magnificent arsenals, inclosed in grandiose monuments; these workshops are destined to repair the mischances, and to provide for the wants of our steam navy at a time when the Navy itself is but just about commencing an existence.

But, as it is impossible to leave these vast arsenals without employment, and their workmen idle, as, by the force of events, all our steam vessels are employed at Toulon, and that there alone repairs are required; what, pray, has been effected at these arsenals constructed in the ports of the ocean? Why, they have been engaged in constructing machines, instead of giving them out to public competition as an encouragement to individual industry.

We possessed Indret already, and its costly products! Must we add to these luxurious constructions? Ought we to have employed the money destined to the growth and amelioration of the fleet, to raise monuments, whose present use is far from being demonstrated?

We have always been led to increase immeasurably the material of the navy, to the detriment of what there is of efficacy, and of buoyancy, in that branch; it would be well to try a contrary system, and I have a conviction that means would be easily found to arm a real steam fleet, and to encourage an useful industry, in demanding from trade good and useful machinery it well knows how to construct.

If I were to trace in this place the real picture of our steam navy, if I were to argue on the fact of the forty-three sailing vessels composing the budget, and to say that there are not six that can enter into comparison with the English shipping, I should not be believed; and yet I shall but have advanced the melancholy truth: the larger number of our vessels belong to that class of ships good in 1830, when they

were built, but at present most certainly far behind all improvement. These vessels, subjected in the Mediterranean to everlasting work, are almost all prematurely worn out. As I intimated some little time ago, they are not sufficient for the service of Algiers and our political missions, but which must, nevertheless, be trusted to them for want of better: their commanders blush to see themselves feeble and powerless; and this I do not say by the side of the English alone, the Russian, the American, the Dutch, and the Neapolitan, are better than ours.

I should have been accused of weakening our means of war at pleasure, if I had not considered our transatlantic packet boats and those of the post office. No doubt we may expect some use from these vessels; but, in the first place, they do not belong to the Navy, which has nothing to demand from them in times of peace; and we shall be deceived if we think we can appropriate them both to their present service and to that of war, in consequence of their peculiar construction and internal arrangements.

The question of expense has arisen on the subject of a steam navy. My first answer will be, that as to precautions to be taken for the safety of her honour, and the defence of her territory, France has often proved she is regardless of the amount of sacrifice; but I will accept the objection: I admit that the machinery and boilers will be very costly; I will merely add that nothing obliges us to go to the whole expense in any one year; and in favour even of so extensive a fabrication, there would be good policy in charging the expenses on several consecutive budgets. It must also be considered that this machinery, well cared for, will last a long time, say, from twenty to thirty years, and that if the boilers decay much sooner, it is possible to construct them more cheaply, in substituting copper for iron plates; not but that the former metal is dearer than the other, but it lasts longer, and after it is worn out, it still possesses its value as metal.

I have endeavoured to establish calculations on the ex-

pense of building and repairing steamers on the same basis as that occasioned by sailing vessels: unfortunately I have not been able to be as exact as I could wish, having only hypothesis as my groundwork; the official publications offer uncertain data to go on in this respect. M. le Baron Tupinier, in a work full of interest, has entered, with the same aim as myself, into certain calculations, but which are no more than acute probabilities, and which, like mine, are likely to sink from their foundation, reposing as they do merely on supposition.

In this unfortunate dilemma, I have not touched on the amount of the expenses of building steam frigates, merely observing that sailing vessels possess also a material which wears out quickly and at all times; while that of the steamer is worn only while the machinery acts, and is in actual service. Then I have taken for the pay and fittings-up of equipages and the consumption of coal, the only appreciable data, and from these data I have drawn this conclusion, that a vessel of the second rank will cause an expense equivalent to that of four vessels of two hundred and twenty horse power.

Thus our actual squadron at Toulon costs what would be the expense of

5 steam frigates of 450-horse power.

22 steam corvettes of 220-horse power.

11 steam boats of 160-horse power.

Making 38 vessels able to carry 20,000 soldiers.

I now ask, that the services that might be rendered by each should be compared together; namely, by eight ships, one frigate, and two sailing vessels, slow and uncertain in their movements, and employing a body of 7767 sailors on the one hand; and thirty-eight steam vessels, manned by 4529 sailors, and able to carry the whole corps of an army of 20,000 men on the other? Should war come, we must disarm the first of these squadrons, while the second is good at all times!

I could still further illustrate this subject, but I stop at simple observations; let others continue and press my conclusions, and draw from them all they may contain. I think, however, I have shewn in a satisfactory manner, that a steam fleet is the only one of use in an offensive and defensive warfare; the only one to protect our coast or to act against that of the enemy, and to second, in an effective manner, the operations of our armies on shore: it remains only for me to speak of one other means of action that we should have to make use of in the event of a war with England.

Without having taken an actual part in the struggles of the French navy with that of England in the days of the Revolution or the Empire, one may have studied history and thence drawn experience. It is an incontestible fact, that although during twenty years the war of squadron against squadron was almost always against us, the exertions of our privateers were almost ever crowned with success. Towards the end of the Empire, divisions of frigates sailing from our ports with the mission of skimming the sea, without compromising themselves uselessly against an enemy superior in number, have inflicted considerable losses on the English commerce; how harassing this commerce is, touching on the very principles of England—'tis tearing their heartstrings!

Until that period, our blows were not carried in that direction, and we had allowed the spirit of British speculation to grow by the war to its then prodigious extent. The lesson ought not now to be lost to us; and we should put ourselves in a position, at the first roar of the cannon, to act powerfully against English commerce so as to shake her confidence. To attain this end, France might establish well-organized privateers in all the quarters of the globe. In the Channel and in the Mediterranean this service might be well granted to steam vessels: those which are employed as packet boats during peace would form, from their extreme swiftness, excellent privateers in time of war! They might advance on

a merchant vessel, pillage it, burn it, and escape themselves from other steam ships of war, whose powers might be weakened by their heavy construction.

It cannot, however, be thus on distant seas. There, frigates should be specially destined as privateers, and although in appearance there may be nothing new in what I am about to observe, I wish to call attention to this point.

My opinion as to frigates is not at all the same as in regard to other vessels; far from reducing, I would increase the number of them in peace as well as in war; there is excellent service for them, and they can be had without any addition of expense, by distributing our stations in a more convenient manner. Frigates alone appear to me to be the proper vessels to represent France at a distance, but then frigates of the largest dimensions. By themselves, with an effective force and imposing ship's crew, they can carry necessary provisions to keep the seas for a considerable period: by themselves they can, as I shall point out by and bye, be equally useful in time of peace as of war. At a thousand or two of leagues from the French coast, I do not admit the distinction I have drawn between the two countries; our foreign stations, which could only hear of war being declared some months after actual hostilities, should be upheld on the most formidable footing. Motives of economy ought here to disappear before enlarged and vigorous ideas. At no time should the powers of France be sacrificed, or even compromised, by a ruinous parsimony!

Up to the present time our distant stations have been composed of a frigate bearing the flag of the general officer commanding the station, and of some corvettes or brigs. Two things have given rise to this state of things: the demand of our consuls, ever desirous to have a vessel of war within reach of their residence; and, in the second place, the strong reason of economy, so frequently considered, which has induced a reduction in the strength and species of vessels, of which it was impossible to lessen the number.

Thus it has resulted, that, wishing to be everywhere, we have been everywhere weak and powerless! it is, in this manner, we send out frigates of forty cannon* and three hundred men, where England and America have frigates of fifty cannon and more, with a complement of five hundred men. They are both, however, but frigates; and if it were requisite that they should one day meet in battle, it would be said everywhere that a French frigate had been taken or destroyed by an English or American one, and although the strength had not been equal, yet our flag would not be the less humiliated by a defeat.

I would establish the principle, that the stations be each composed of two or three frigates of the first class; these frigates should act together under the orders of an admiral, and thus profit by all the advantages incidental to a squadron. Ever at sea, officers and sailors would learn to know and appreciate one another, and then the reproach of impassiveness thrown out against our admirals, who seem completely spell-bound to the chief spot of their station, would be done away with. Wherever this force should show itself, and it ought

* Thus for the station of the Brazils and La Plata, we have a frigate carrying the flag of the admiral commanding the station: the English and American Governments have also one frigate; but below is the respective strength of these vessels:

France. *Africaine*, 40 cannons, 311 men.

England. *Alfred*, 50 cannons, 445 men.

America. *Raritan*, 60 cannons, 470 men.

The remainder of the station is composed of small vessels, and in this respect again we are inferior in kind and number.

Another example. Our station at Bourbon and Madagascar, destined to protect our growing establishment of Maynotte, and to support the Catholics of Abyssinia, whose friendship preserves to France one of the keys of the Red Sea, is thus composed:

1 corvette of 22 cannon

1 lighter transport

1 brig of 30 cannon

1 steamer of 180-horse power.

While England has at the Cape Station:

1 frigate of 50 cannon

2 brigs of 16 cannon

1 frigate of 44 cannon

1 steamer of 360-horse

2 corvettes of 26 cannon

power.

to be continually employed in sailing from one point to another of its station, it would be observed to be powerful and respectable, having the ability of curbing the errors of foreign nations without those costly appeals to the mother-country of which Mexico and La Plata have given us such melancholy examples. We should no longer have those small vessels stationed at the points where our diplomatic agents reside, and so likely by their weakness to draw down insults, which our flag ought to know how to avoid, but never suffer. We should no longer be compelled to witness, at the commencement of a war, the majority of those vessels so weak, seized by inimical frigates, without being able to strike a blow in return. Far from this; we should possess at all points of the globe, divisions of frigates ready to follow in the steps of those glorious squadrons which so nobly struggled for the country in the Indian seas: they would sail around our colonies; around those new territories seized on the distant ocean by our thoughtful policy, destined to serve as a basis for their operations, as well as to become the asylum of our privateers. I will add, that this method of representing the country in distant places would be more advantageous to our commerce than that in use at the present time. In short, a squadron possessed of the means of making itself respected, would be looked upon with very different eyes to the continued presence of a small vessel, accustomed to be observed and soon forgotten. I deceive myself, or it will be found that this constant visiting, always expected, always regular, would be a very powerful protection to our interests; and our merchant vessels would find themselves much better off from the influence of our flag, thus exhibited from time to time, to countries who have a deprecating idea of the power of France, than from the hurried presence of our small ships of war, now in practice. It will be remarked that I have not spoken of steam vessels for these foreign stations. I think we should only employ them rarely, and with the resolution of shutting them up in our colonies at the first sound of war.

In general, our steam vessels should not leave our coasts, further than to be able to return to take in fresh coal. I still argue on the understood hypothesis of a war against Great Britain; and it falls within this idea, that we should have but few friends on the sea, our maritime commerce would therefore soon disappear.

At a distance from France, how can we procure coal and other requisites? Our steamers, deprived of this necessity to action, would be compelled to make use of their sails, and we know that up to the present time they thus make but little way; they would have no chance with the corvettes or brigs of the poorest description. Perhaps the use and consequent perfection of the screw, in permitting to a steamer all the advantages of a sailing vessel, may effect some change in the state of things. Steam would then become a powerful auxiliary for our privateers; but this union of steam and sail need not in the least alter what I have above stated: steamers appointed to serve as a squadron or on our coast ought to possess the greatest swiftness,—to look to steam alone as to its primary means of success.

I have now accomplished what I intended in this notice, and have now only to conclude in a few words. Taking the chances, however remote, of a war with England as the basis of our naval establishment, I have said that I think it ought to be thus defined: a powerful organization and developement of the steam navy on our coasts and in the Mediterranean; the establishment of strong and well-appointed privateers on every portion of the globe, where in peace our commerce possesses interest, or where in war we could act with advantage.

To realize the first part of my desire a stop must be put to the unfortunate current that swallows up our naval resources in useless expenses, in establishments, and material out of proportion to our wants, to the detriment of our fleet, which is the real expression of our naval strength: this would give us the means of providing for expenses really necessary.

We must lose our confidence in sailing vessels, and apply

ourselves to the study and perfection of our steamers; experimentalize at first without building many of the same design, which, in case of non-success, draws on the discontent of which we have already had too many examples.

Let each department have its duties. To sustain a squadron of at least twenty steam ships on a war footing; to allow to this squadron the study of tactics; to form a code of action for steamers; assign to the packet boats of Algiers a sufficient duty, but rigorously limited, as has been effected by those in the Levant: the requirements of war are not so great in Africa that we need sacrifice all the power of our navy and all idea of economy and order; the naval administration can easily get rid of its boats of one hundred and sixty horse power, in giving them as an equivalent for the expense incurred in establishing the first-named service; to construct a certain number of light steamers in which everything should be sacrificed to celerity, to carry government dispatches. And to place on service at least twenty-two frigates of the first class for the use of our foreign stations.

The expenses of the construction of vessels and of keeping them on foot, will not be heavier than those of our present fleet; with a navy thus organized we should be in a situation to resist all aggression which might wound our honor or interests; and a declaration of war would never find us without defence. In short, we should have the means of acting immediately without leaving all our resources to chance. And I insist that all these results may be obtained without any serious increase of expense.

If, to disprove my assertions, they are to be termed Utopian, a name marvellously calculated to frighten timid minds, and to bury them in the ordinary wheelrut, I invite those who may thus answer me to consider attentively all that has been effected for some years past, and what is still going on now-a-days in England, and then say if the same effects may not be produced in France.

It has been painful to me, in this little recital, to be

obliged to keep up an afflicting parallel with a country which has advanced so far beyond our own in the study of its individual interests; it has been painful to me to denude the secret of our weakness in opposition to the strength of the British power; but I should esteem myself happy if I could, by a sincere avowal of these melancholy truths, dissipate the illusion in which so many sensible men seem to be on the subject of the real state of naval affairs in France, and decide them in asking with me for some salutary reform which may give to our Navy a new era of power and glory.

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